Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A device for the partial crystallisation of a phase in a solution, comprising at least one pump for circulation of the solution in a circuit of a heat exchanger formed from at least one tube in contact with a cooling circuit, wherein the circuit of the exchanger includes a zone comprising static means to maintain supercooling in order to delay the appearance of crystals, and a zone comprising static supercooling rupture means to allow the appearance of crystals.

2. (Previously Presented) A device according to claim 1, also comprising a zone comprising static devices for mixing the solution so that the crystallised particles of the phase are continuously mixed with the solution during the circulation of the said solution.

3. (Previously Presented) A device according to claim 1, in which the supercooling maintenance means include a non–stick coating on at least one part of the internal walls of each tube, where the coating takes the form of a material and/or of a surface state designed to delay the appearance of crystals.

4. (Previously Presented) A device according to claim 3, in which the material is a hydrophobic plastic or glass.

5. (Previously Presented) A device according to claim 3, in which the surface state has a low roughness.

6. (Previously Presented) A device according to claim 1, in which the supercooling rupture means include at least one change of lining of the internal walls of each tube, and/or at least one change of direction of the circulation of the solution, and/or at least one obstacle to the circulation of the solution on the internal walls of each tube.

7. (Previously Presented) A device according to claim 6, in which the change of lining of the internal walls takes the form of a change of material and/or of a change of the surface state, designed to interrupt the supercooling and allow the appearance of crystals.

8. (Previously Presented) A device according to claim 7, in which the material of the supercooling rupture means is a metal.

9. (Previously Presented) A device according to claim 7, in which the change of surface state at the supercooling rupture means takes the form of greater roughness.

10. (Previously Presented) A device according to claim 1, in which the mixing devices include at least one non–stick coating on at least one part of the internal walls of each tube, and/or at least one change of direction of the circulation of the solution, and/or at least one obstacle to the circulation of the solution on the internal walls of each tube.

11. (Previously Presented) A device according to claim 6, in which the change of direction is an elbow in the circulation circuit, and/or a chicane, and/or at least one change of section inside the circulation circuit.

12. (Previously Presented) A device according to claim 6, in which the obstacles to the circulation of the solution include needles and/or plates.

13. (Previously Presented) A device according to claim 1, in which the section inside the circuit progressively increases.

14.-16. (Cancelled.)

17. (Previously Presented) A device according to claim 1, in which the circulation circuit includes means for introducing bubbles of gas into the solution.

18. (Previously Presented) A device according to claim 17, in which the means for introducing the gas are placed in the circulation of the solution or at the walls of a tube.

19. (Previously Presented) An assembly, including a multiplicity of devices according to claim 1.

20. (Previously Presented) A method for the partial crystallisation of a phase in a solution, comprising a step that consists in circulating the solution in a circuit of a heat exchanger formed from at least one tube using at least one pump, including a step that consists of:

– holding the temperature below the start–of–freezing temperature in order to delay the appearance of crystals with static supercooling maintenance means, and

– bringing about supercooling rupture with static supercooling rupture means to trigger the appearance of the crystallisation.

21. (Previously Presented) A method according to claim 20, comprising a step consisting of continuously mixing the crystallised particles of the phase with the solution during the circulation of the said solution by means of static solution mixing devices.

22. (Previously Presented) A method according to claim 21, comprising a step consisting of varying the flow of the solution over time, by acting on a valve or on the pump.

23. (Previously Presented) A method according to claim 20, comprising a step consisting of varying the flow of the solution by means of a valve in the circulation circuit.

24. (Previously Presented) A method according to claim 20, comprising a step consisting of introducing bubbles of gas into the solution circulation circuit.

25. (Previously Presented) A device according to claim 4, in which the surface state has a low roughness.

26. (Previously Presented) A device according to claim 8, in which the change of surface state at the supercooling rupture means takes the form of greater roughness.

27. (Previously Presented) A device according to claim 10, in which the change of direction is an elbow in the circulation circuit, and/or a chicane, and/or at least one change of section inside the circulation circuit.

28. (Previously Presented) A device according to claim 10, in which the obstacles to the circulation of the solution include needles and/or plates.